

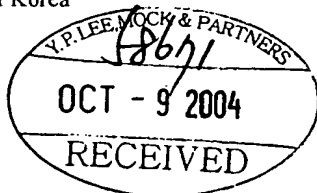
Rec'd PCT/PTO 24 MAR 2005

PATENT COOPERATION TREATY

From the
INTERNATIONAL PRELIMINARY EXAMINING

To:
LEE, Young-Pil

The Cheonghwa Building, 1571-18 Seocho-dong, Seocho-gu,
137-874 Seoul, Republic of Korea



PCT

WRITTEN OPINION

(PCT Rule 66)

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Date of mailing
(day/month/year) 05 OCTOBER 2004 (05.10.2004)

Applicant's or agent's file reference
SH-18951-PCT

REPLY DUE within 2 months from
the above date of mailing

International application No.
PCT/KR2003/001949

International filing date (day/month/year)
24 SEPTEMBER 2003 (24.09.2003)

Priority date(day/month/year)
26 SEPTEMBER 2002 (26.09.2002)

International Patent Classification (IPC) or both national classification and IPC

IPC7 G11B 5/62

Applicant

SAMSUNG ELECTRONICS CO., LTD. et al

1. This written opinion is the first (first,etc.) drawn by this International Preliminary Examining Authority.

2. This opinion contains indications relating to the following items:

- I ☒ Basis of the opinion
- II ☐ Priority
- III ☐ Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- IV ☐ Lack of unity of invention
- V ☒ Reasoned statement under Rule 66.2(a)(ii) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- VI ☐ Certain documents cited
- VII ☐ Certain defects in the international application
- VIII ☐ Certain observations on the international application

3. The applicant is hereby invited to reply to this opinion.

When ? See the time limit indicated above. The applicant may, before the expiration of that time limit, request this Authority to grant an extension, see Rule 66.2(d)

How ? By submitting a written reply, accompanied, where appropriate, by amendments, according to Rule 66.3
For the form and the language of the amendments, see Rules 66.8 and 66.9

Also For an additional opportunity to submit amendments, see Rule 66.4
For an examiner's obligation to consider amendments and/or arguments, see Rule 66.4bis
For an informal communication with the examiner, see Rule 66.6

If no reply is filed, the international preliminary examination report will be established on the basis of this opinion.

4. The final date by which the international preliminary examination report must be established according to Rule 69.2 is: 16 JANUARY 2005 (16.01.2005)

Name and mailing address of the IPEA/KR
Korean Intellectual Property Office
920 Dunsan-dong, Seo-gu, Daejeon 302-701,
Republic of Korea
Facsimile No. 82-42-472-7140

Authorized officer

KIM, Yong Woong

Telephone No. 82-42-481-5698



I. Basis of the opinion**1. With regard to the elements of the international application:***

- ☐ the international application as originally filed
- ☐ the description:
pages _____, as originally filed
pages _____, filed with the demand
pages _____, filed with the letter of _____
- ☐ the claims:
pages _____, as originally filed
pages _____, as amended (together with any statement) under Article 19
pages _____, filed with the demand
pages _____, filed with the letter of _____
- ☐ the drawings:
pages _____, as originally filed
pages _____, filed with the demand
pages _____, filed with the letter of _____
- ☐ the sequence listing part of the description:
pages _____, as originally filed
pages _____, filed with the demand
pages _____, filed with the letter of _____

2. With regard to the language, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item.

These elements were available or furnished to this Authority in the following language _____ which is

- ☐ the language of a translation furnished for the purposes of international search (under Rule 23.1(b)).
- ☐ the language of publication of the international application (under Rule 48.3(b)).
- ☐ the language of the translation furnished for the purposes of international preliminary examination (under Rules 55.2 and/or 55.3).

3. With regard to any nucleotide and/or amino acid sequence disclosed in the international application, the written opinion was drawn on the basis of the sequence listing:

- ☐ contained in the international application in printed form.
- ☐ filed together with the international application in computer readable form.
- ☐ furnished subsequently to this Authority in written form.
- ☐ furnished subsequently to this Authority in computer readable form.
- ☐ The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.
- ☐ The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.

4. ☐ The amendments have resulted in the cancellation of:

- ☐ the description, pages _____
- ☐ the claims, Nos. _____
- ☐ the drawings, sheet/fig _____

5.

- ☐ This opinion has been drawn as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).

* Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this opinion as "originally filed."

V. Reasoned statement under Rule 66.2(a)(ii) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement**1. Statement**

| | | | |
|-------------------------------|--------|-----|-----|
| Novelty (N) | Claims | 1-5 | YES |
| | Claims | | NO |
| Inventive step (IS) | Claims | 2-5 | YES |
| | Claims | 1 | NO |
| Industrial applicability (IA) | Claims | 1-5 | YES |
| | Claims | | NO |

2. Citations and explanations

Reference is made to the following document:

D : US 2002-0154596 A1 (Wei-Chin Hsu et al.) 24 Oct. 2002

Us.

1. Novelty and Inventive Step

The subject matter of Claims 1-5 of the present invention discloses a high density recording medium with a super-resolution near-field structure including a sequential stack of a second dielectric layer, a recording layer, a protective layer, a mask layer, a first dielectric layer and a polycarbonate layer, wherein the mask layer comprises high melting point metal oxide or silicon oxide.

D describes a super-resolution recordable optical disk forming sequentially on the substrate under a dielectric layer, a mask layer, an interface layer, an organic dye layer, an isolation layer and a protection layer.

The subject matter of the present invention (Claim 1) and D have the same structure of a recording medium using a super-resolution near-field structure. The only difference lies in that the present invention (Claim 1) has a mask layer comprising high melting point metal oxide or silicon oxide. But the difference does not involve any technical difficulties for a person skilled in the art.

Therefore, the subject matter of Claim 1 is considered to be novel, but it does not have an inventive step (Article 33(2)-(3) PCT).

2. Industrial Applicability

Claims 1-5 of the present invention meet the criteria set out in PCT Article 33(4) because they are directed to a high density recording medium. Therefore, the invention is considered to be industrially applicable.